

Claims:

- 1 1. (Currently amended) A method for identifying resources associated
2 with a communications network, the method comprising:
3 defining a structured address format having a plurality of address
4 segments, each address segment being associated generally with one or
5 more properties of a managed resource of the communications network;
6 and
7 assigning to the managed resource a structured address
8 constructed according to the structured address format, the structured
9 address being a coded identity designation used to identify and
10 distinguish the managed resource from other managed resources in the
11 communications network, each address segment of the assigned
12 structured address having a value that conveys information about the
13 one or more properties of the managed resource with which that address
14 segment is associated.
- 1 2. (Original) The method of claim 1, further comprising assigning a name
2 to the managed resource and associating the name with the structured
3 address assigned to the managed resource.

- 1 3. (Original) The method of claim 2, further comprising translating
2 between the name and the structured address assigned to the managed
3 resource using a domain name system service.
- 1 4. (Original) The method of claim 1, further comprising storing the
2 structured address in an inventory system used by an operations system
3 support (OSS) to support the communications network.
- 4 5. (Original) The method of claim 1, further comprising storing the
5 structured address at a network element in the communications
6 network.
- 1 6. (Original) The method of claim 1, further comprising transmitting the
2 structured address assigned to the managed resource over the
3 communications network in a packet.
- 1 7. (Original) The method of claim 1, further comprising producing by a
2 network element in the communications network a report containing the
3 structured address assigned to the managed resource.
- 1 8. (Original) The method of claim 1, wherein a value assigned to one of
2 the address segments in the structured address operates to identify a
3 zone in the communications network to which service traffic can be
4 transported.

1 9. (Original) The method of claim 1, wherein a value assigned to one of
2 the address segments of the structured address operates to identify a
3 type of service.

1 10. (Original) The method of claim 1, wherein a value assigned to one of
2 the address segments of the structured address operates to identify a
3 transmission bit rate for service traffic over the communications network.

1 11. (Currently amended) The method of claim 1, wherein the ~~private~~
2 communications network includes one of an optical network, an Ethernet
3 network, and an Internet Protocol network.

1 12. (Original) The method of claim 1, wherein the structured address
2 format includes a dotted decimal notation.

1 13. (Original) The method of claim 1, wherein the managed resource is a
2 data service and the structured address operates as a service identifier.

1 14. (Original) The method of clam 1, wherein the managed resource is a
2 path through the communications network over which service traffic is
3 transported and the structured address operates as a path identifier.

1 15. (Original) The method of claim 1, wherein the structured address is a
2 private address.

- 1 16. (Original) The method of claim 1, wherein the structured address
2 format is a first structured address format, and further comprising
3 translating the structured addresses defined according to the first
4 structured address format into structured addresses defined according to
5 a second structured address format.
- 1 17. (Original) The method of claim 1, further comprising querying a
2 network element in the communications network to take an inventory of
3 managed resources based on structured addresses recorded by the
4 network element.
- 1 18. (Original) The method of claim 1, wherein the communications
2 network supports circuit-based communications, packet-based
3 communications, or a combination thereof.
- 1 19. (Original) The method of claim 1, further comprising incorporating the
2 structured address assigned to the managed resource in an inventory
3 system of an operations support system.
- 1 20. (Original) The method of claim 1, further comprising:
2 associating a first circuit identifier with a path by which traffic of a
3 service is transported over the communications network; and
4 associating the structured address with the first circuit identifier.

21. (Original) The method of claim 20, further comprising:

associating a second circuit identifier with the path; and

associating the structured address with the second circuit
identifier.

22. (Original) The method of claim 20, further comprising:

associating a second circuit identifier with a second path by which
traffic of the service is transported over the communications network;
and

associating the structured address with the second circuit
identifier.

23. (Currently amended) An inventory system for managing resources of a
private communications network, the inventory system comprising:

a structured address format having a plurality of address
segments, each address segment being associated generally with one or
more properties of a managed resource of the private communications
network; and

means for assigning to the managed resource a structured address
constructed according to the structured address format, the structured
address being a coded identity designation used to identify and
distinguish the managed resource from other managed resources in the

11 private communications network, each address segment of the assigned
12 structured address having a value that conveys information about the
13 one or more properties of the managed resource with which that address
14 segment is associated.

1 24. (Original) The inventory system of claim 23, further comprising means
2 for translating structured addresses defined according to the structured
3 address format into structured addresses defined according to a second
4 structured address format.

1 25. (Original) The inventory system of claim 23, further comprising means
2 for associating a name with the structured address assigned to the
3 managed resource.

1 26. (Original) The inventory system of claim 25, further comprising means
2 for translating between the name and the structured address assigned to
3 the managed resource.

1 27. (Currently amended) An operations support system, comprising:
2 means for defining a structured address format having a plurality
3 of address segments, each address segment being associated generally
4 with one or more properties of a managed resource of a private
5 communications network; and

means for assigning to the managed resource a structured address constructed according to the structured address format, the structured address being a coded identity designation used to identify and distinguish the managed resource from other managed resources in the private communications network, each address segment of the assigned structured address having a value that conveys information about the one or more properties of the managed resource with which that address segment is associated.

28. (Currently amended) The ~~inventory~~ operations support system of claim 27, further comprising means for translating structured addresses defined according to the structured address format into structured addresses defined according to a second structured address format.

29. (Currently amended) The ~~inventory~~ operations support system of claim 27, further comprising means for associating a name with the structured address assigned to the managed resource.

30. (Currently amended) The ~~inventory~~ operations support system of claim 29, further comprising means for translating between the name and the structured address assigned to the managed resource.